

Serial No. 09/845,336
Docket No. T36-131965M/RS

2

AMENDMENTS TO THE CLAIMS:

1. (Currently amended) A group III nitride compound semiconductor light-emitting device, comprising:
 - a semiconductor laminate portion formed on a substrate and including a light-emitting layer; and
 - a reflection surface provided on said substrate and disposed so as to be opposite to a side surface of said light-emitting layer,
 - wherein ~~said semiconductor laminate portion and said reflection surface are provided on the same chip, and~~ a predetermined distance is provided between said semiconductor laminate portion and said reflection surface.
2. (Previously presented) A group III nitride compound semiconductor light-emitting device according to claim 1, wherein said reflection surface reflects light emitted from said side surface of said semiconductor laminate portion into a direction of an optical axis of said light-emitting device.
3. (Previously presented) A group III nitride compound semiconductor light-emitting device according to claim 1, wherein said predetermined distance comprises a distance between said reflection surface and said side surface of said semiconductor laminate portion which is in a range of from 0.1 to 10 μ m.
4. (Currently amended) A group III nitride compound semiconductor light-emitting device according to claim 1, further comprising:
 - an n pad electrode,
 - wherein said reflection surface comprises a material which is the same as that of said ~~an n pad electrode.~~
5. (Currently amended) A group III nitride compound semiconductor light-emitting device according to claim 4, further comprising:
 - a second reflection surface comprising ~~wherein~~ a portion of said n pad electrode

Serial No. 09/845,336
Docket No. T36-131965M/RS

3

opposite to said side surface of said semiconductor laminate portion ~~forms a second reflection surface.~~

6. (Previously presented) A group III nitride compound semiconductor light-emitting device according to claim 4, wherein said reflection surface is formed on an n-type semiconductor layer which is formed by etching to a first depth, and said n pad electrode is formed on said n-type semiconductor layer which is formed by etching to a second depth shallower than said first depth.

7. (Original) A group II nitride compound semiconductor light-emitting device according to claim 4, wherein said reflection surface is formed integrally with said n pad electrode.

8-14. (Canceled)

15. (Previously presented) A group III nitride compound semiconductor light-emitting device according to claim 1, wherein said predetermined distance comprises a distance between said reflection surface and said side surface of said semiconductor laminate portion which is in a range of 0.2 μm to 7 μm .

16. (Previously presented) A group III nitride compound semiconductor light-emitting device according to claim 1, wherein said predetermined distance comprises a distance between said reflection surface and said side surface of said semiconductor laminate portion which is in a range of 0.3 μm to 5 μm .

17. (Previously presented) A group III nitride compound semiconductor light-emitting device according to claim 1, wherein said reflection surface is formed on a layer in said semiconductor laminate portion.

18. (Previously presented) A group III nitride compound semiconductor light-emitting device according to claim 1, wherein an upper surface of said reflection surface is elevated

Serial No. 09/845,336
Docket No. T36-131965M/RS

4

higher than said light-emitting layer.

19. (Previously presented) A group III nitride compound semiconductor light-emitting device according to claim 1, wherein said reflection surface comprises a curved reflection surface.

20-22. (Canceled)

23. (Previously presented) A group III nitride compound semiconductor light-emitting device according to claim 1, wherein said reflection surface reflects light emitted from said side surface of said semiconductor laminate portion

24. (Previously presented) A group III nitride compound semiconductor light-emitting device according to claim 1, wherein said reflection surface comprises a shape for reflecting light in a direction of an optical axis for said light-emitting device.

25. (Previously presented) A group III nitride compound semiconductor light-emitting device according to claim 1, wherein said predetermined distance comprises a distance between said reflection surface and said side surface of said semiconductor laminate portion which is no greater than 10 μ m.

26. (Previously presented) A group III nitride compound semiconductor light-emitting device according to claim 1, wherein said direction of an optical axis comprises a direction of a center axis of said device.

27. (Previously presented) A group III nitride compound semiconductor light-emitting device according to claim 1, further comprising:

an n-pad electrode formed on said semiconductor laminate portion, said reflection surface comprising a side surface of said n-pad electrode having a shape for reflecting light in a direction of an optical axis for said light-emitting device.

Serial No. 09/845,336
Docket No. T36-131965M/RS

5

28. (Previously presented) A group III nitride compound semiconductor light-emitting device according to claim 1, wherein said reflection surface is formed around a circumference of said light-emitting layer.

29. (Previously presented) A group III nitride compound semiconductor light-emitting device according to claim 1, wherein at least a portion of said reflection surface is formed near a plane of said light-emitting layer.

30. (Previously presented) A group III nitride compound semiconductor light-emitting device according to claim 1, wherein said reflection surface is disposed so as to be transversely opposite to a side surface of said light-emitting layer.

31. (Previously presented) A group III nitride compound semiconductor light-emitting device according to claim 1, wherein said reflection surface comprises a thickness of at least 0.7 μm .

32. (Canceled)

33. (New) A group III nitride compound semiconductor light-emitting device according to claim 1, further comprising:
a reflective material formed on said substrate and comprising said reflection surface.

34. (New) A group III nitride compound semiconductor light-emitting device according to claim 33, wherein said a reflective material comprises an electrically conductive material.

35. (New) A group III nitride compound semiconductor light-emitting device according to claim 33, wherein said semiconductor laminate portion comprises an n-type semiconductor layer, said reflective material being formed on a same layer as said n-type semiconductor layer.

36. (New) A group III nitride compound semiconductor light-emitting device according to

Serial No. 09/845,336
Docket No. T36-131965M/RS

6

claim 1, wherein said side surface comprises a vertical side surface.

37. (New) A group III nitride compound semiconductor light-emitting device, comprising:
a semiconductor laminate portion formed on a substrate and comprising:
an n-type semiconductor layer; and
a light-emitting layer formed on said n-type semiconductor layer; and
an electrically conductive material formed on a same layer as said n-type semiconductor layer and comprising a reflection surface disposed so as to be opposite to a vertical side surface of said light-emitting layer,
wherein a distance provided between said semiconductor laminate portion and said reflection surface is no greater than 10 μ m.